

```
DDDDDDDDDDDDDD  CCCCCCCCCCCCCC  XXX  XXX
DDDDDDDDDDDDDD  CCCCCCCCCCCCCC  XXX  YXX
DDDDDDDDDDDDDD  CCCCCCCCCCCCCC  XXX  XXX
DDD             DDD  CCC           XXX  XXX
DDD             DDD  CCC           XXX  XXX
DDD             DDD  CCC           XXX  XXX
DDD             DDD  CCC           XXX  XXX
DDD             DDD  CCC           XXX  XXX
DDD             DDD  CCC           XXX  XXX
DDD             DDD  CCC           XXX  XXX
DDD             DDD  CCC           XXX  XXX
DDD             DDD  CCC           XXX  XXX
DDD             DDD  CCC           XXX  XXX
DDD             DDD  CCC           XXX  XXX
DDD             DDD  CCC           XXX  XXX
DDD             DDD  CCC           XXX  XXX
DDD             DDD  CCC           XXX  XXX
DDDDDDDDDDDDDD  CCCCCCCCCCCCCC  XXX  XXX
DDDDDDDDDDDDDD  CCCCCCCCCCCCCC  XXX  XXX
DDDDDDDDDDDDDD  CCCCCCCCCCCCCC  XXX  XXX
```



```

0000 1      .TITLE  DCX_TRANSFER  transfer vectors for data compression / expansion
0000 2      .IDENT  'V04-000'
0000 3
0000 4      *****
0000 5
0000 6      *
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0000 24     *
0000 25     *****
0000 26
0000 27     ++
0000 28     FACILITY:
0000 29
0000 30     DCX -- Data Compression / Expansion Facility
0000 31
0000 32     ABSTRACT:
0000 33
0000 34     The Data Compression / Expansion procedures provide a general
0000 35     method for reducing the storage requirement for a arbitrary data.
0000 36
0000 37     ENVIRONMENT:
0000 38
0000 39     Native mode, user mode
0000 40
0000 41     AUTHOR:
0000 42
0000 43     David Thiel      June 1982
0000 44
0000 45     MODIFIED BY:
0000 46
0000 47     V03-001 JWT0101      Jim Teague      04-Mar-1983
0000 48     Change psect name to help transfer vector find its
0000 49     way to the front of the image when linked.
0000 50
0000 51     :--

```



```
0000 53 ::
0000 54 :: Symbol definitions
0000 55 ::
0000 56 ::
0000 57 $DCXDEF GLOBAL ; Define facility symbols globally
0000 58
0000 59
0000 60
00000000 61 .PSECT $$VECTOR_0_DCX, PIC, SHR, NOWRT, EXE, PAGE
0000 62
0000 63 ::
0000 64 :: Define macro to set up transfer vectors
0000 65 ::
0000 66
0000 67 .MACRO TRANSFER ENTRY_POINT
0000 68 .SHOW BINARY ;Display code produced
0000 69 .ALIGN QUAD ;For style, speed, and space
0000 70 .TRANSFER ENTRY_POINT
0000 71 .MASK ENTRY_POINT ;Copy entry point mask
0000 72 BRW ENTRY_POINT+2 ;Go to routine code
0000 73 .NOSHOW BINARY
0000 74 .ENDM TRANSFER
0000 75
0000 76 .ALIGN PAGE
0000 77 DCX_TRANSFER:
0000 78 ::
0000 79 :: Each of these macro invoked defines a universal symbol
0000 80 :: which is an entry point for this shareable library.
0000 81 :: These vectors must never** be moved in order to preserve
0000 82 :: compatibility with previously linked images.
0000 83 ::
0000 84 TRANSFER DCX$ANALYZE_INIT ; Initialize data analysis
0000 .MASK DCX$ANALYZE_INIT ;Copy entry point mask
FFFD' 31 0002 BRW DCX$ANALYZE_INIT+2 ;Go to routine code
0005 85 TRANSFER DCX$ANALYZE_DATA ; Perform data analysis
0005 .ALIGN QUAD ;For style, speed, and space
0008 .MASK DCX$ANALYZE_DATA ;Copy entry point mask
FFF5' 31 000A BRW DCX$ANALYZE_DATA+2 ;Go to routine code
000D 86 TRANSFER DCX$MAKE_MAP ; Compute compression function
000D .ALIGN QUAD ;For style, speed, and space
0010 .MASK DCX$MAKE_MAP ;Copy entry point mask
FFED' 31 0012 BRW DCX$MAKE_MAP+2 ;Go to routine code
0015 87 TRANSFER DCX$ANALYZE_DONE ; Release data analysis context
0015 .ALIGN QUAD ;For style, speed, and space
0018 .MASK DCX$ANALYZE_DONE ;Copy entry point mask
FFE5' 31 001A BRW DCX$ANALYZE_DONE+2 ;Go to routine code
001D 88 TRANSFER DCX$COMPRESS_INIT ; Initialize data compression
001D .ALIGN QUAD ;For style, speed, and space
0020 .MASK DCX$COMPRESS_INIT ;Copy entry point mask
FFDD' 31 0022 BRW DCX$COMPRESS_INIT+2 ;Go to routine code
0025 89 TRANSFER DCX$COMPRESS_DATA ; Perform data compression
0025 .ALIGN QUAD ;For style, speed, and space
0028 .MASK DCX$COMPRESS_DATA ;Copy entry point mask
FFD5' 31 002A BRW DCX$COMPRESS_DATA+2 ;Go to routine code
002D 90 TRANSFER DCX$COMPRESS_DONE ; Release data compression context
002D .ALIGN QUAD ;For style, speed, and space
0030 .MASK DCX$COMPRESS_DONE ;Copy entry point mask
```

FFCD'	31	0032		BRW	DCX\$COMPRESS DONE+2	:Go to routine code
		0035	91	TRANSFER	DCX\$EXPAND_INIT	: Initialize data expansion
		0035		.ALIGN	QUAD	:For style, speed, and space
0000'		0038		.MASK	DCX\$EXPAND_INIT	:Copy entry point mask
FFC5'	31	003A		BRW	DCX\$EXPAND_INIT+2	:Go to routine code
		003D	92	TRANSFER	DCX\$EXPAND_DATA	: Perform data expansion
		003D		.ALIGN	QUAD	:For style, speed, and space
0000'		0040		.MASK	DCX\$EXPAND_DATA	:Copy entry point mask
FFBD'	31	0042		BRW	DCX\$EXPAND_DATA+2	:Go to routine code
		0045	93	TRANSFER	DCX\$EXPAND_DONE	: Release data expansion context
		0045		.ALIGN	QUAD	:For style, speed, and space
0000'		0048		.MASK	DCX\$EXPAND_DONE	:Copy entry point mask
FFB5'	31	004A		BRW	DCX\$EXPAND_DONE+2	:Go to routine code
		004D	94			
		004D	95	.ALIGN	PAGE	
		0200	96			
		0200	97	.END		

DCX TRANSFER
Symbol table

transfer vectors for data compression / D 1
15-SEP-1984 23:37:58 VAX/VMS Macro V04-00
4-SEP-1984 23:44:35 [DCX.SRC]TRANSFER.MAR;1

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(2)

```

DCX$ANALYZE_DATA      ***** X 02
DCX$ANALYZE_DONE      ***** X 02
DCX$ANALYZE_INIT      ***** X 02
DCX$COMPRESS_DATA     ***** X 02
DCX$COMPRESS_DONE     ***** X 02
DCX$COMPRESS_INIT     ***** X 02
DCX$C_BOUNDED         = 00000101 G
DCX$C_EST_BYTES       = 00000202 G
DCX$C_EST_RECORDS     = 00000201 G
DCX$C_LIST            = 00000001 G
DCX$C_ONE_PASS        = 00000102 G
DCX$EXPAND_DATA       ***** X 02
DCX$EXPAND_DONE       ***** X 02
DCX$EXPAND_INIT       ***** X 02
DCX$MAKE_MAP          ***** X 02
DCX_TRANSFER          00000000 R 02

```

+-----+
! Psect synopsis !
+-----+

PSECT name	Allocation	PSECT No.	Attributes
. ABS .	00000000 (0.)	00 (0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
\$ABSS	00000000 (0.)	01 (1.)	NOPIC USR CON ABS LCL NOSHR EXE RD WRT NOVEC BYTE
\$VECTOR_0_DCX	00000200 (512.)	02 (2.)	PIC USR CON REL LCL SHR EXE RD NOWRT NOVEC PAGE

+-----+
! Performance indicators !
+-----+

Phase	Page faults	CPU Time	Elapsed Time
Initialization	48	00:00:00.13	00:00:00.88
Command processing	151	00:00:00.59	00:00:03.63
Pass 1	94	00:00:00.84	00:00:02.25
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	31	00:00:00.32	00:00:01.28
Symbol table output	2	00:00:00.02	00:00:00.02
Psect synopsis output	2	00:00:00.02	00:00:00.63
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	328	00:00:01.93	00:00:08.69

The working set limit was 1200 pages.
4448 bytes (9 pages) of virtual memory were used to buffer the intermediate code.
There were 10 pages of symbol table space allocated to hold 16 non-local and 0 local symbols.
97 source lines were read in Pass 1, producing 14 object records in Pass 2.
9 pages of virtual memory were used to define 8 macros.

! Macro library statistics !

Macro library name

Macros defined

\$255\$DUA28:[DCX.OBJ]DCX.MLB;1
\$255\$DUA28:[SYSLIB]STARLET.MLB;2
TOTALS (all libraries)

1
3
4

69 GETS were required to define 4 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:TRANSFER/OBJ=OBJ\$:TRANSFER MSRC\$:TRANSFER/UPDATE=(ENH\$:TRANSFER)+LIB\$:DCX/LIB

0075 AH-BT13A-SE
VAX/VMS V4.0

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